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Information Bulletin

Grade 3 Mathematics 1996-97

This document was written primarily for:

Students	✓
Teachers	✓
Administrators	✓
Parents	
General Audience	
Others	✓ Superintendents

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This bulletin contains general information about the Provincial Student Assessment program and information specific to the Grade 3 Mathematics Achievement Test. **This bulletin replaces all previous bulletins.**


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October 1996

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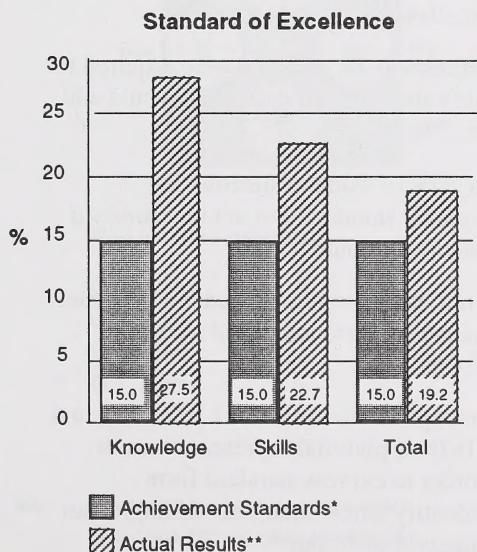
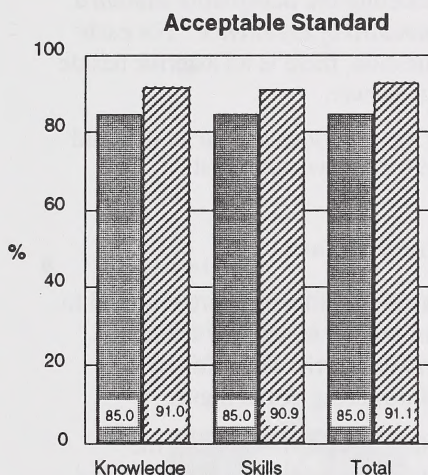


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Looking Back: Highlights of 1996

Grade 3 Mathematics

This information provides teachers, school administrators, and the public with an overview of the results for the June 1996 Grade 3 Mathematics provincial assessment. It complements the detailed school and jurisdiction reports.



*the percentage of students in the province expected to meet the acceptable standard and the standard of excellence

**the percentage of students in the province who met the standards (based on those who wrote)

Who Wrote the Test?

All students registered in Grade 3 were expected to write the 1996 Mathematics Achievement Test. A total of 37 022 students completed the test in English. In 1996, only a small proportion of students in Grade 3 did not write the test: 2.1% of students were absent and 2.6% of students were excused from writing by their superintendent.

What Was the Test Like?

The test consisted of two sections; 45 questions were integrated in a two-part narrative. Five strands were assessed: Numeration, Operations and Properties, Measurement, Geometry, and Graphing. The questions were classified in two reporting categories: Knowledge and Skills.

How Well Did Students Do?

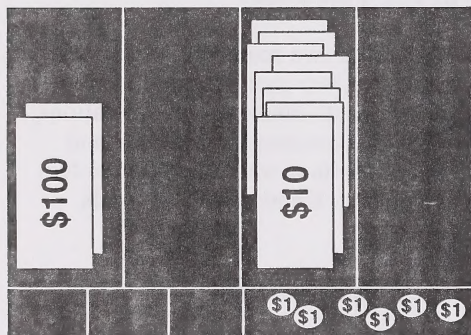
The results presented in this report are based on scores achieved by all students except those who wrote the test in French. Results for students who wrote in French are reported separately. Students' overall performance in Grade 3 Mathematics was better than expected.

In 23.6% of the schools, the percentage of students meeting the *acceptable standard* was significantly above expectations for the province. In 69.6% of the schools, the percentage of students meeting the *acceptable standard* was not significantly different from provincial expectations. In 6.9% of schools, the percentage of students meeting the *acceptable standard* was significantly below provincial expectations. Schools where fewer than five students wrote the Grade 3 test are not included in these school calculations.

Has Achievement Changed Since Last Year?

Results for Grade 3 Mathematics in 1996 are comparable to those obtained in 1995. More students than expected met the *acceptable standard* and the *standard of excellence* on both components of the test and on the total test.

10. We came up to pay for our pizza.
Mama Mia opened her money box.
This is what it looked like.



How much money is in the money box?

- * ☐ \$286
☐ \$682
☐ \$200 806
☐ \$600 802
29. I paid for the balloons.
I had 59¢ left in my pocket.
- Which group of coins makes 59¢?
- ☐ 1 quarter, 1 nickel, 4 pennies
☐ 2 quarters, 1 dime, 1 nickel, 4 pennies
☐ 2 quarters, 4 pennies
* ☐ 5 dimes, 1 nickel, 4 pennies

Commentary and Sample Questions from the Grade 3 Mathematics Achievement Test 1996

Sample questions from the 1996 test and accompanying discussion are provided to highlight the strengths and weaknesses of students meeting the *acceptable standard* and the *standard of excellence*. For each sample question, there is an asterisk beside the correct answer.

Note that the questions appear as they did on the 1996 Achievement Test.

Acceptable Standard

For **question 10**, students were required to first determine the number of 100s, 10s, and 1s, and then write the value in standard form using dollar signs.

Almost 90% of students meeting the *acceptable standard* but not the *standard of excellence* were able to do this.

For **question 29**, students were required to identify the group of coins that would add up to .59¢.

Over 70% of students meeting the *acceptable standard* but not the *standard of excellence* could do this.

Overall, the strengths of students who met the *acceptable standard* include the ability to

- recognize the amount of 100s, 10s, and 1s from pictorial representations in order to express standard form
- identify a new time after adding on an interval of 1 hour
- identify temperatures to one degree intervals and recognize appropriateness of clothing for that temperature
- obtain information directly found in pictographs, charts, or tallies
- identify multiples of 2s, 5s, and 10s
- identify three-dimensional figures

The difficulties that students meeting the *acceptable standard* experienced were in their ability to

- compare fractions
- determine possible combinations of members of two sets
- compare two specified amounts
- calculate a sum of money after making purchases
- make a comparison after interpreting a graph

Standard of Excellence

For **question 6**, students were required to first identify two pieces of each pizza. Then students were required to compare the four amounts to determine which was the greatest amount.

Almost 95% of the students who met the *standard of excellence* were able to do this.

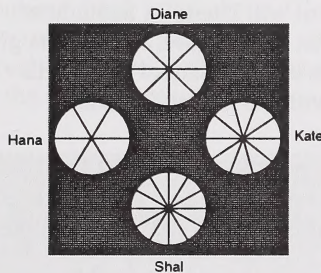
For **question 43**, students were required to first calculate a sum, then compare amounts using the terms more than, less than, or equal to.

Almost 75% of the students who met the *standard of excellence* were able to do this. This question was clearly more challenging than question 6 for students meeting the *standard of excellence*.

Students who met the *standard of excellence* had few difficulties with this assessment. Their strengths were in their ability to

- interpret information on charts, diagrams, or pictures to solve problems
- use more than one step in order to solve problems
- select appropriate calculation operations in order to solve problems
- make estimations when comparing

6. I saw some friends.
Diane, Kate, Shal, and Hana were having a party.
Each girl's pizza was cut in different sizes.
Each girl ate two pieces of her pizza.



Who ate the most pizza?

- ☐ Diane
☐ Kate
☐ Shal
* ☐ Hana

43. We ended our fun time with a snack.
I filled two 250 mL glasses with juice.

How much juice is this?

- ☐ More than 1000 mL
☐ Less than 500 mL
☐ Equal to 1000 mL
* ☐ Equal to 500 mL

Appropriate Reading Level

Information received from teachers and parents indicates the need to continue to keep the story line simple and basic so that the reading does not affect the ability of the students to show their mathematical knowledge. Every effort is made through ongoing reviews with Grade 3 teachers to maintain reading level appropriate for end-of-year Grade 3 assessment.

Teachers and parents have indicated their appreciation of receiving a list of non-math words that appear in the stems of questions that can be introduced to students before the writing of the test. The purpose of introducing these non-math words is to familiarize students with them so that when they encounter them in the questions, the words are recognized and the meanings are understood. This way, they do not interfere with the students' ability to solve the math problems.

Story Line Context

Information received from teachers and parents indicates that the students being tested enjoy the story lines created. Efforts are continually made by the

Grade 3 teachers involved to create story lines that are familiar, realistic, and use as few words as possible.

Reporting the Results

On August 23, 1996, each school jurisdiction received electronically a district report and individual school reports regarding their students' achievement, as well as guidelines for interpreting these results in relation to provincial standards.

To facilitate reflection on school programs, we expect that results will be shared with all school staff (not just teachers of grades 3, 6, and 9), as well as with parents and the community.

Two copies of an individual profile for each student will be sent to the school that the student will attend in September. We expect that the Parent Copy will be given to parents and the School Copy will remain with the student's record.

All Achievement Tests administered in 1993 and prior to 1993 are no longer secured.

Looking Ahead: What is Upcoming for 1997

General Information

The Provincial Student Assessment Program provides teachers, parents, students, school administrators, Alberta Education, and the public with information about what students know and can do in relation to provincial standards. Group results are reported at school, district, and provincial levels to improve learning opportunities for students.

The assessments are administered in two subject areas at Grade 3—language arts and mathematics—and in four subject areas at grades 6 and 9—language arts, mathematics, social studies, and science.

The assessments are based on provincial standards, which reflect important learnings in the subject areas listed above. Classroom teachers from across the province are extensively involved in developing and field testing the assessment instruments.

Administering the Assessment

Information about the nature of the provincial assessments as well as their administration to special needs students can be found in the *General Information Bulletin, Provincial Student Assessment Program*, which is mailed each fall to all superintendents and principals.

Schedule

The written-response component of English and French Language Arts will be administered during the last week of May. The machine-scorable component of all achievement tests will be administered during the last two weeks of June. Specific information regarding scheduling is provided in the current *General Information Bulletin, Provincial Student Assessment Program*.

To minimize any risks to security, we recommend that all students complete the test on the same day. Superintendents

approve a local schedule for achievement test administration within the dates provided. Students who are absent when the tests are administered and who return to school by the end of the school year must write the tests upon their return. By scheduling the tests early in the administration period, most, if not all, absentees can be tested upon their return to school. The principal is responsible for ensuring the security of the tests.

The tests that will be administered each year are:

Grade 3

English Language Arts (*Part A: Writing and Part B: Reading*)

Mathematics (English and French forms)

Grade 6

English Language Arts (*Part A: Writing and Part B: Reading*)

Français 6^e année (*Partie A: Production écrite and Partie B: Lecture*)

Mathematics (English and French forms)

Science (English and French forms)* see p. 6

Social Studies (English and French forms)

Grade 9

English Language Arts (*Part A: Writing and Part B: Reading*)

Français 9^e année (*Partie A: Production écrite and Partie B: Lecture*)

Mathematics (English and French forms)

Science (English and French forms)

Social Studies (English and French forms)

Students in French Programs

All students in French programs must write English Language Arts, French Language Arts, and French versions of other achievement tests if their language of instruction is French. Alberta Education will send a checklist to schools by January requesting an indication of how many English or French tests are required. These forms must be returned through jurisdiction offices by mid-February.

* Resources for the implementation of the revised Program of Studies for elementary science will not be available until the 1997–98 school year. Therefore, implementation of the revised Program of Studies for students in French programs is optional for the 1996–97 school year. Schools offering grade 6 science in French must decide which form of the science test they will write in June 1997. The choices are either the translated form of the 1996 Grade 6 Science Achievement Test based on the previous program or the 1997 Grade 6 Science Achievement Test based on the revised program. Schools offering Grade 6 Science in French must choose one form or the other for all students in Grade 6 writing in French.

Marking Achievement Tests Locally

Teachers will be able to mark the tests before returning them to Alberta Education. Teachers can use the results as part of an individual student's year-end assessment, as well as for planning instruction.

Performance Assessments

Performance assessments provide students with real-life tasks. These assessments address many of the learner expectations that cannot be easily measured using only paper and pencil strategies.

These tasks have been developed by classroom teachers and are designed to model good classroom instruction and assessment practices.

The Student Evaluation Branch uses these tasks to collect a broader base of information about what students know and can do than achievement tests alone can provide. These assessments will be administered to a provincial sample of students in all subjects on a rotating basis. The following assessments will be given in 1997:

Grade 3

- informational book tasks in language arts

Grade 6

- social studies: inquiry into basic needs

Grade 9

- problem-solving and communication tasks in science

Standards: Curriculum, Assessment, Achievement

The move toward results-based curricula has re-emphasized the need for a clear delineation of standards and their purpose. All standards and all methods of setting standards require judgement.

The process of setting a standard can only be as good as the judgements that go into it. The standard will depend on whose judgements are involved in the process. In this sense, all standards are subjective. Yet once a standard has been set, the decisions based on it can be made objectively. Instead of a separate set of judgements for each test-taker, you will have the same set of judgements applied to all test-takers. Standards cannot be objectively determined, but they can be objectively applied.¹

Definitions

The Achievement Testing Program is directly concerned with three different but related standards. These provincial standards are curriculum standards, assessment standards, and achievements standards. Local targets are also described in this section.

- **Curriculum Standards** are the expected student learnings sequenced into grade levels. They include broad statements of knowledge, skills, and attitude expectations against which student

¹ Passing Scores; Samuel A. Livingston, Michael J. Zieky; Educational Testing Service, 1982.

performance is judged. These standards are established in the process of curriculum development and are found in the *Program of Studies* document produced for each subject.

- **Assessment Standards** are the criteria adopted for judging actual student achievement relative to curriculum standards. They are ultimately expressed and applied to test scores. They are derived from answers to questions such as: What scores must a student obtain or how many questions on a given test must a student answer correctly in order for his/her performance on the test to be judged as acceptable or excellent?
- **Achievement Standards** are judgements that specify what percentages of students are expected to achieve an acceptable and an excellent level of performance in relation to each course of studies, i.e. to the relevant curriculum standards. It is important to point out that this judgement is not a prediction of the percentage of students who will actually achieve acceptable or excellent levels of performance, but rather a specification of the percentage of students at a given grade or year in school who are *expected* to achieve the acceptable (85%) or excellent standard (15%). **The 85% of students expected to meet the acceptable standard includes those who meet the standard of excellence.** These standards apply to school, jurisdiction, and provincial performance.
- **Local targets** are goals set in schools/districts to focus plans for helping students learn what is expected by the provincial government. These local targets reflect the specific needs of students, the views of teachers, school administration, and the local community, and the resources available to provide learning opportunities for students.

Confirming Standards

Confirming standards is a process whereby judgements about students' performance on the assessment are made in relation to provincial standards. For more information on confirming standards procedures, refer to Appendix A of the *Achievement Testing Program Provincial Report, June 1993 Administration*. For information on the selection of teachers for participation in the confirming standards process, refer to the current *General Information Bulletin, Provincial Student Assessment Program*.

Purpose of Assessment Standards

The provincial standards are the basis upon which we assess how well students have learned mathematics by the end of Grade 3. These standards reflect the essential learnings that all Alberta students are expected to achieve. Provincial standards are useful, therefore, for assessing Grade 3 students in all types of school programs—public, private, and home education. By comparing actual results with provincial standards, decisions can be made about whether achievement is, in fact, “good enough.”

Description of the Mathematics Assessment Standards

The following statements describe what is expected of Grade 3 students who are meeting the *acceptable standard* or the *standard of excellence* on independent work at the end of the Grade 3 Mathematics program. The statements represent the standards against which student achievement will be measured.

Acceptable Standard

Students who meet the *acceptable standard* in Grade 3 Mathematics are expected to have a basic understanding of mathematical concepts and related procedural knowledge. They are expected to be able to demonstrate their understanding in concrete, pictorial,

and symbolic modes, and to be able to translate from one mode to another. For example, students meeting the *acceptable standard* should know that the solution to the number sentence $12 - 3 = \square$ is 9 and be able to demonstrate their understanding in concrete and pictorial ways. They are expected to be able to write related number sentences and verify them, using manipulatives and diagrams.

To meet the *acceptable standard*, students are expected to present ideas in an understandable way, using objects, diagrams, and appropriate everyday language.

Students meeting the *acceptable standard* are expected to perform the mathematical operations and procedures that are fundamental to the program, and apply what they know in solving simple problems in familiar settings. They are able to describe, to a limited degree, the steps they use to solve a particular problem.

The expectation is that students meeting the *acceptable standard* have a positive attitude about mathematics in their daily lives. They are able to demonstrate confidence when using simple mathematical procedures, and when applying problem-solving strategies in familiar settings.

Standard of Excellence

Students who meet the *standard of excellence* in Grade 3 Mathematics are expected to have a superior understanding of mathematical concepts and related procedural knowledge. They are consistently able to demonstrate their understanding in concrete, pictorial, and symbolic modes, and easily translate from one mode to another. They are able to create problem situations to illustrate concepts and to analyze and explain relationships among concepts. For example, students meeting the *standard of excellence* should be able to write all

number sentences related to $12 - 3 = \square$, justify them using manipulatives and diagrams, and create problem situations to exemplify the relationship. They should be able to explain how $12 + 3 = \square$ is related to $12 - 3 = \square$; also, they should be able to explain why these are not defined as related number sentences.

To meet the *standard of excellence*, students are expected to verbalize and write about mathematical situations clearly, using correct technical terms.

Students meeting the *standard of excellence* are expected to perform the mathematical operations and procedures that are fundamental to the program, and to be able to apply what they know in solving and creating novel problems. They are able to clearly describe the steps that they use.

Students meeting the *standard of excellence* should have a positive attitude toward mathematics and show confidence in performing mathematical tasks. They are expected to be self-motivated risk-takers who persevere when solving novel problems. They demonstrate initiative in trying new methods, and are creative in their approach to problem solving.

Grade 3 Mathematics Assessment

General Description

The Grade 3 Mathematics Assessment consists of three components:

- *Multiple-choice component*—completed by all Grade 3 students in the province
- *Timed number facts*—completed in June 1995 by a provincial sample of Grade 3 students. A master copy has been forwarded to all schools for those teachers who wish to administer timed number facts.
- *Performance-based component*—completed in June 1996 by a provincial sample of Grade 3 students. The next

provincial administration will be in June 1998.

In 1997, only the multiple-choice component will be administered.

Multiple-Choice Component

The multiple-choice component has 45 questions integrated in a two-part narrative. Part A has 22 questions and Part B has 23 questions. Each part is designed to be completed in 30 minutes. Additional time of up to 30 minutes may be provided for students to complete the test. A break should be provided between Part A and Part B.

The blueprint for the multiple-choice component is on the next page. The practice questions on pages 11 to 21 may be used by teachers to help their students prepare for the provincial assessment.

Students will record answers to all questions directly in their test booklets.

Students will need pencils, rulers, erasers, and scrap paper for calculations.

Students may use manipulative materials and calculators. It is recommended that students use calculators only if they generally use them in their math program.

Calculators are not needed to successfully complete the assessment.

Reporting Categories Indicators

The following points briefly highlight the learnings for each reporting category.

Knowledge

- recalls facts, concepts, terminology
- knows number facts
- recognizes place value
- knows procedures for computations
- knows procedures for constructing and measuring
- knows how to use a calculator/computer
- knows mental computation, estimation strategies

Skills

- represents basic mathematical concepts in concrete, pictorial, and/or symbolic modes
- applies a mathematical concept in familiar and new situations
- creates new problem situations that exemplify a concept
- justifies answers
- judges reasonableness of answers
- communicates why and when certain strategies are appropriate
- applies basic mathematical concepts to solve problems
- demonstrates and applies relationships among numbers, operations, number forms, and modes of representation
- explains relationships among geometric forms
- uses a variety of problem-solving strategies

Blueprint

This blueprint shows the reporting categories under which questions are classified. The number of questions in each category is approximate.

General Learner Expectations GLE*	Knowledge	Skills	Total Ques.(%)
Understands number relationships for whole numbers 0 to 1000, and explores fractions (fifths and tenths)	6	9	15 (33)
Understands operations with whole numbers and uses appropriate strategies to solve problems	4	8	12 (27)
Estimates, measures, and compares, using whole numbers and standard units of measure	2	8	10 (22)
Describes, classifies, and relates the properties and positions of 3-D objects and 2-D shapes	2	2	4 (9)
Collects, displays, and interprets data to make predictions	1	3	4 (9)
Total Questions (%)	15 (33)	30 (67)	45(100)

* General Learner Expectations from *Mathematics Interim Program of Studies, 1994*

Practice Questions

The practice questions on pages 11 to 21 appeared on the 1996 Achievement Test and may be used with students. Other questions from the 1996 Achievement Test remain secured. The practice questions, along with questions from previous bulletins, can be used to prepare students for the current Achievement Test. These questions illustrate the nature and complexity of those that will appear on the 1997 test, although the emphasis will be different. The key and descriptors for the practice questions are on page 22.

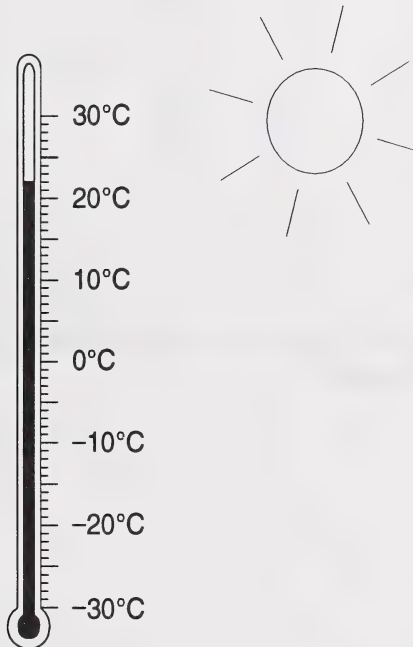
- Students will need a pencil, eraser, and scrap paper. Students may use manipulatives and calculators (if these are used throughout the year).
- Read the text that appears at the beginning to your students.
- Instruct the students to read and complete the questions independently.
- Direct the students to fill in the circle in front of the answer that has been chosen.

A TRIP TO MAMA MIA'S PIZZA

Hi. My name is Sarah. One Saturday my dad said, "Let's go to Mama Mia's Pizza for lunch. We got ready and climbed into the car. "Fasten your seatbelts," said Dad. "Away we go!"

Use this picture to answer questions 1 and 2.

Before we left, I checked the thermometer.



1. What temperature is shown on the thermometer?

- ☐ -22°C
- ☐ 18°C
- ☐ 22°C
- ☐ 24°C

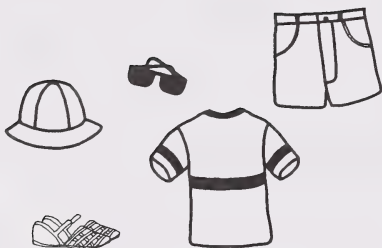
2. Which type of clothing is best for the temperature shown on the thermometer?



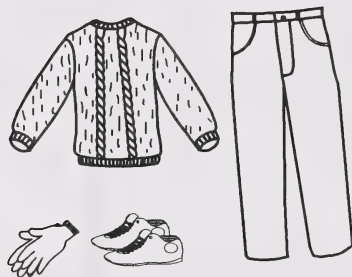
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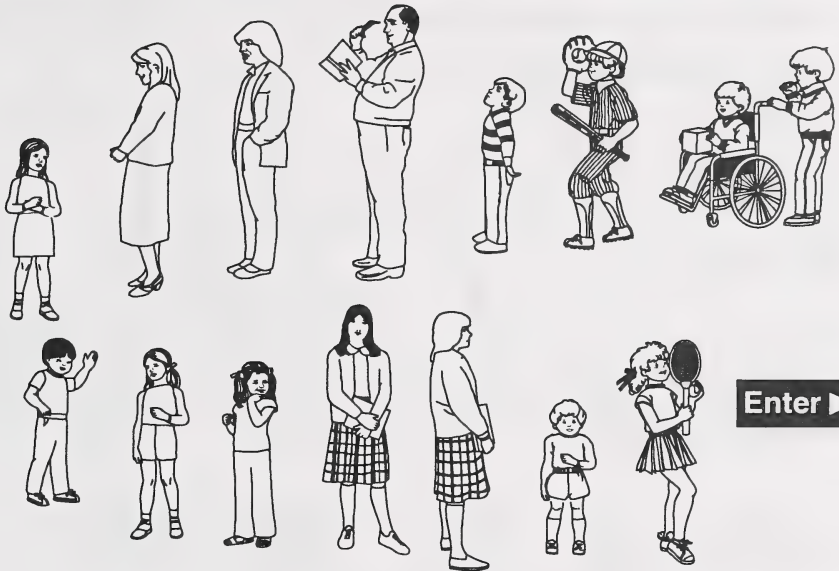


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☐

3. I noticed that the restaurant was full of people. There was also a long lineup.



Look at the lineup.

In which position is the person with the hat?

- ☐ Tenth
- ☐ Twelfth
- ☐ Thirteenth
- ☐ Nineteenth

4. It takes 2 min to seat each person.

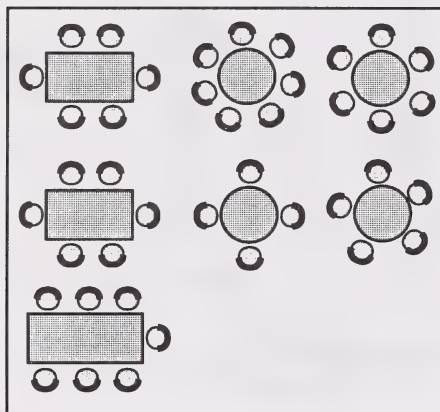
How many minutes will it take to seat 15 people?

- ☐ 15 min
- ☐ 17 min
- ☐ 30 min
- ☐ 32 min

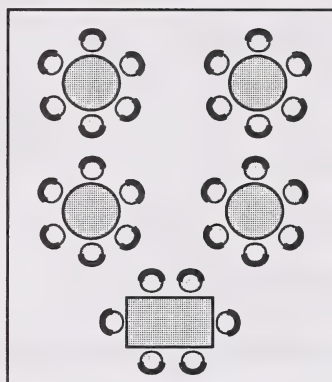
5. I wanted to remember how many chairs there are in Mama Mia's Pizza.
I recorded this number sentence in my notebook.



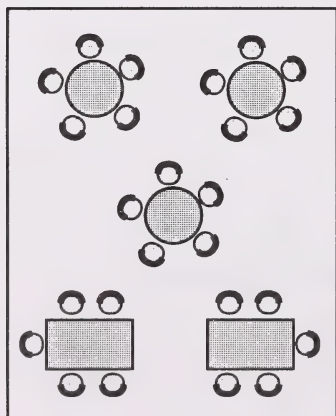
Which picture matches my number sentence?



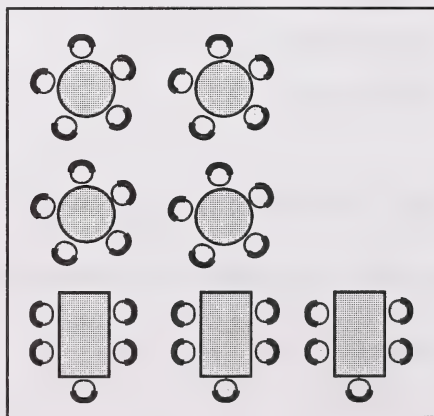
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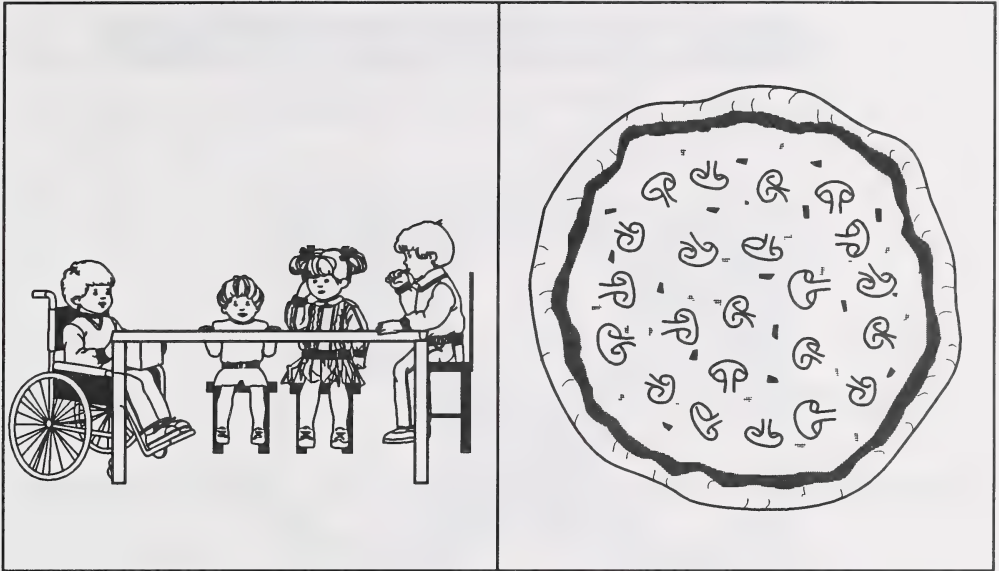


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☐

Use these pictures to answer question 6.



6. The four people at the table share the pizza equally.

How much of the pizza does each person get?


- ☐ $\frac{1}{5}$
- ☐ $\frac{1}{4}$
- ☐ $\frac{1}{3}$
- ☐ $\frac{1}{2}$

7. I saw this chart on the wall.

<i>Pizzas ordered this week</i>	
432	Mama Mia's Special
702	Cheese
234	Ham and Pineapple
403	Pepperoni


Starting at the top of my notebook, I wrote these numbers from **SMALLEST** to **LARGEST**.

Which notebook shows the numbers from smallest to largest?




702
432
403
234

☐




234
403
432
702

☐



432
702
403
234

☐



234
432
403
702

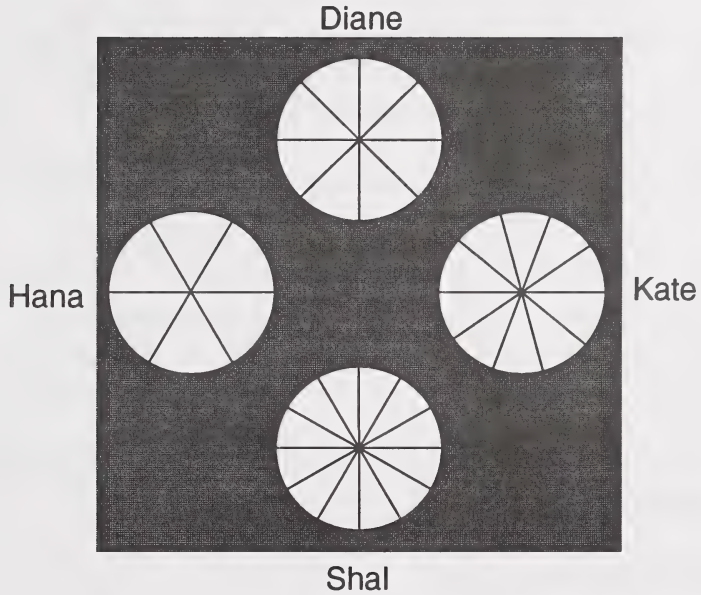
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8. I saw some friends.

Diane, Kate, Shal, and Hana were having a party.

Each girl's pizza was cut in different sizes.

Each girl ate two pieces of her pizza.

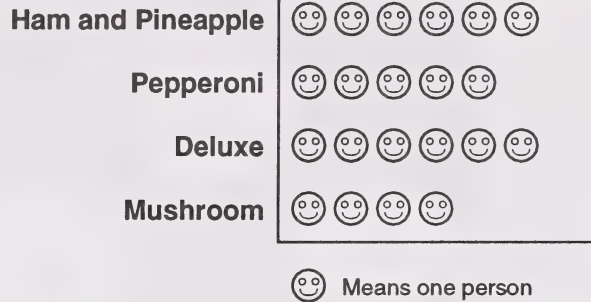


Who ate the most pizza?

- ☐ Diane
- ☐ Kate
- ☐ Shal
- ☐ Hana

Use this pictograph to answer questions 9 and 10.

Some people talked about their favourite pizza. I drew a pictograph of their choices.



9. Which kind of pizza did the FEWEST people choose as their favourite?

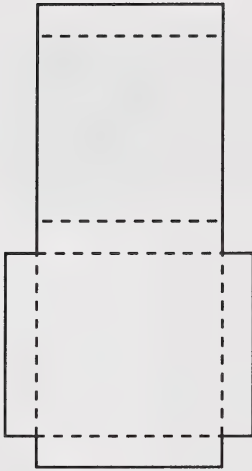
- ☐ Ham and Pineapple
- ☐ Pepperoni
- ☐ Deluxe
- ☐ Mushroom

10. How many people chose the Deluxe pizza as their favourite?

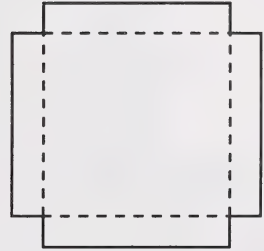
- ☐ 7
- ☐ 6
- ☐ 5
- ☐ 4

11. The cook's helper was making boxes to pack pizzas in.

Which shape will fold up to make a closed box for a pizza?



☐

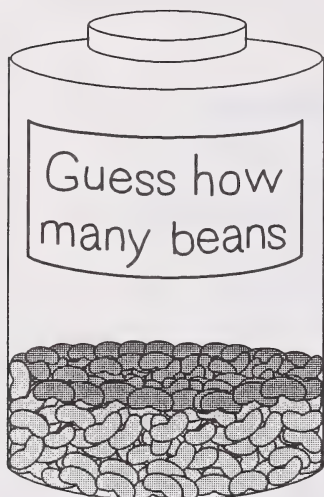


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12. There was a contest.

There are 409 beans in this jar.

Mama Mia gave a prize to the person with the closest guess.



Ryan guessed 362.

Carrie guessed 398.

Angela guessed 419.

Terry guessed 445.

Who won the contest?

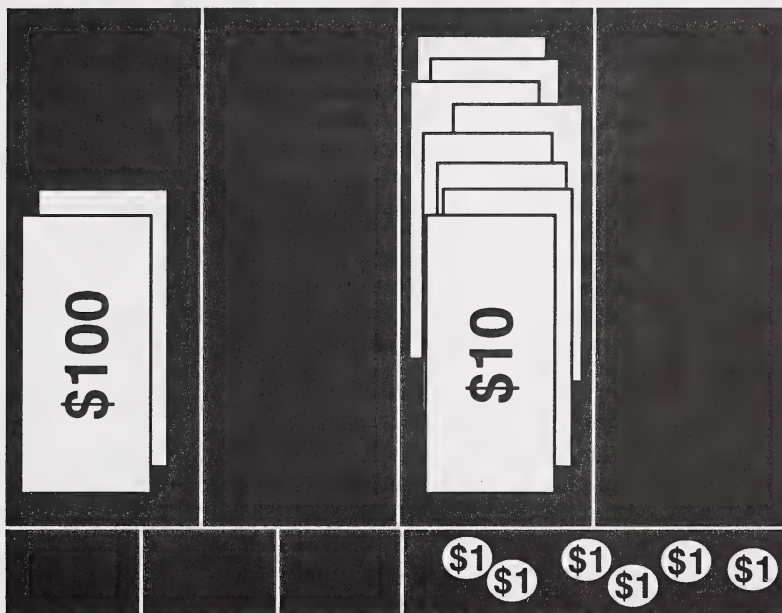
- ☐ Ryan
- ☐ Carrie
- ☐ Angela
- ☐ Terry

13. I filled two 250 mL glasses with juice.

How much juice is this?

- ☐ More than 1000 mL
- ☐ Less than 500 mL
- ☐ Equal to 1000 mL
- ☐ Equal to 500 mL

14. My dad paid for our pizza and juice.
Mama Mia opened her money box.
This is what it looked like.



How much money is in the money box?

- ☐ \$286
 - ☐ \$682
 - ☐ \$200 806
 - ☐ \$600 802
15. He got 59¢ change.
- Which group of coins makes 59¢?**
- ☐ 1 quarter, 1 nickel, 4 pennies
 - ☐ 2 quarters, 1 dime, 1 nickel, 4 pennies
 - ☐ 2 quarters, 4 pennies
 - ☐ 5 dimes, 1 nickel, 4 pennies

Key and Descriptors for Practice Questions

Ques. No.	Key	Program Strand	Reporting Category*	Curriculum Standard
1	C	Measurement	S	Determine temperature to a one-degree interval
2	C	Measurement	S	Determine if weather is cold, cool, or warm, and select appropriate clothing
3	C	Operations and Properties	S	Use ordinals or cardinals to find the position of a particular object
4	C	Operations and Properties	S	Count by 2 fifteen times or multiply by 2
5	D	Operations and Properties	S	Relate a number sentence to a pictorial representation
6	B	Operations and Properties	S	Recognize an equal-sharing situation, then divide into 4 equal parts
7	B	Numeration	K	Order whole numbers by comparing the 100s and 10s
8	D	Numeration	S	Compare fractions
9	D	Data Management	S	Interpret a pictograph to solve a problem
10	B	Data Management	K	Find a number on a pictograph
11	A	Geometry	S	Identify which net could be made into a closed box
12	C	Numeration	S	Determine number closest to 409
13	D	Operations and Properties	S	Compare sums using more than, less than, equal to
14	A	Numerations	S	Determine the number of 100s, 10s, and 1s, and express the value in standard form
15	D	Measurement	S	Recognize names and values of coins up to \$1.00; Determine which grouping has a value of .59¢

* S—Skills includes problem solving and application of knowledge.

K—Knowledge includes knowledge of facts, concepts, generalizations, and procedures.

Preparing Students for the Assessment

The best way to prepare students for writing the mathematics exam is to use instructional time teaching the important learnings in Grade 3 Mathematics.

Teachers may also wish, however, to familiarize their students with the format of the multiple-choice component of the assessment and the kinds of questions that will appear on it by having them work through the practice questions included in this bulletin.

We hope that teachers will share the following information with their students to help them prepare for the mathematics assessment.

Suggestions for Answering Multiple-Choice Questions

The following suggestions are provided to help prepare students for the Grade 3 Mathematics multiple-choice component.

1. Have students listen to the story **BEFORE** they complete the mathematics questions.

This will give students a setting for the questions so that they will be more meaningful.

2. Guide students to look at **ALL** information and to think carefully before they answer the questions.

This will guide them to obtain information from numbers, words, signs, charts, pictures, graphs, or maps.

3. Encourage students to **REMEMBER** the question that they need to answer as they look at all the information.

This will help them focus on what is being asked of them.

4. Encourage students to go back and **REVIEW** the information given.

This will help them keep on track when two or three questions pertain to the same diagram. (Situations like this are always identified with these words: “Use this information to answer questions ☐ and ☐ .”)

5. Encourage students to **CHECK** their calculations, even when their answer is one of the choices.

This will help them choose the correct answer rather than an answer that is a commonly made mistake.

6. Encourage students to choose one **BEST** answer.

This will help them make a choice when two answers appear to be close and they can’t identify the correct answer right away.

Alberta Education Contact

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